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ABSTRACT

Results are reported of a study to determine how beginning university students perceive social stratification in contemporary Sweden. The sample consisted of 169 students in a Swedish university. Participants were asked to classify segments in which their society is divided. They were then asked the basis for their classification and the content of the categories they identified. Twelve percent identified society as harmonic and non-stratified. Two concepts emerged from the group. Students believed that either social stratification is undesirable and therefore should not be given expression or that social stratification is nonexistent. The second category, an harmonic stratified society, was identified by 47 percent of the group. In this category, students perceive the existence of social stratification as absolute. The higher position of one group is not dependent on the lower position of other groups. The third category, identified by 41 percent of the sample, is a non-harmonic stratified society. The belief is that one group in the hierarchy is defined by its relation to another group or groups. Conflict is implicitly or explicitly assumed among the groups. Further research will determine significant changes in thinking and values as a result of the students' completing their degree in higher education. (Author/KC)

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THE SOCIAL STRUCTURE OF SOCIETY THROUGH THE EYES OF UNIVERSITY STUDENTS

Paper presented at the Annual Meeting of the Nordic Association for Educational Research, October 23-26, 1980, Göteborg, Sweden

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I. GENERAL BACKGROUND AND PURPOSE

The problem area of social stratification is a classical one, and one which is foremost within sociology. If one considers how the relationship between social change and education is reflected in educational research and planning, two traditions can be observed. In the first case, the educational system is seen primarily as an independent variable, as a way of changing the social structure of society. This fundamental approach has dominated for many years. Progressionism as an educational line of thought, the optimistic belief in development that dominated educational planning until the end of the 1970's, is an example of this (see also e.g. Lundgren, 1979). Research has been carried out within a consensus perspective (Paulston, 1976). In the second case, it is education itself that is seen as an dependent variable. Changes in education are often seen as reflecting changes in social conditions. The educational system is assumed to have the primary task of contributing to social reproduction. Theories focussing on social and cultural reproduction of the type introduced by Bourdieu & Passeron and Bernstein are one example of research with this latter orientation. Theoretical qualification research with Altvater as one of the prominent figures is another example. In these cases, education is related to a social structure characterized by conflict between classes of society. In accordance with Paulston, research is carried out within a conflict perspective and researchers working in this tradition are often regarded as educational pessimists.

According to Marton´s (1979) discrimination between different perspectives within which research undertakings are made, social stratification has empirically often been the object of inquiry within the *first order perspective* i.e. the basic question concerns what the social stratification *really looks like* in the system of society and/or the system of education. Bowles and Gintis' work (1976) constitutes an American example. Studies by Härnqvist (1978) and Svensson (1977) can be mentioned as significant contributions within the first order perspective. It should be noted that almost irrespective of whatever aspect different studies have been based on, it has been possible to establish the fact that there are real differences between social classes with regard to both educational aspirations and the actual choice of education.

There are also a number of studies focussing on how society is *conceived of* by people, a formulation of the research problem in accordance with the *second order perspective*, in Marton´s (1979) terminology. Within this perspective, people´s conception of phenomena in the surrounding world are made objects of description and analysis. Characteristic of the major part of the research concerning the conception of university students within the problem area in question is that, firstly, researchers have primarily interested themselves in political attitudes from a general point of view and secondly, that they have above all applied questionnaire techniques with fixed response alternatives or different rating scales. The many American studies that deal, among other things, with changes in political attitudes during university and college education may be illustrative of this approach. A majority of them have been made by applying the traditional liberalism-conservatism scales. Astin (1977) concludes that

> ... *freshmen pretest measure on the political orientation factor correlated modestly (r=42) with the posttest outcome four years later* (ibid p 36).

The general picture of results shows that the students tend to become more liberally orientated with varying effects during their studies and that this depends on the type of education involved.

According to Gesser (1978), there appears to be only two Swedish studies focussing on changes in political attitudes during higher education, one of them carried out in Lund (Carlsson & Gesser, 1965), the other one in Umeå (Cigéhn, 1976). A main conclusion drawn from the Umeå investigation is that the main choice as to political ideology is more influenced by the students' social background than by the university environment. Despite this there are, however, indications that a radicalization is taking place, foremost among students having a socialistic ideology.

The Lund study concerns a period ten years before the Umeå material was collected (1960-62 and 1970-72 respectively). The political sympathies among the Lund and Umeå students are considerably different. The percentage of bourgeois students is much higher in the 1960 material from Lund than in the 1970 material from Umeå. The change that

occurs in the Lund study is that if there is any transfer between socialistic and bourgeois attitudes this goes from the former to the latter, above all because students from working class backgrounds abandon their socialistic ideology.

One example of research more directly related to the problem of how the social structure of society is conceived of by students is reported by Sandberger (1976). Within a joint European project concerning the socialization effects of higher education, a number of questions are put to the students by applying a fixed response alternative questionnaire. In the particular question about the social structure of society the subjects are asked to choose from four alternative diagrams the one they hold to be the most representative picture of the state in their own country. A rough summary of the results shows that about 20% of the students chose the diagramme which showed that there are no clear borderlines between different strata of society. The two diagrammes describing in different proportions the stratification in the social structure in terms of *upper*, *middle* and *lower* were marked by the majority of the students (approx. 50% and 25% respectively). About 5% chose the fourth diagramme which showed a division into strata, *upper* and *lower*.

The investigation reported on here is undoubtedly representative of the second-order perspective. In contrast to the above-mentioned studies within the same perspective, this investigation is qualitatively orientated and covers a limited number of students. The material to be analyzed originates from two Swedish sibling-projects on effects of higher education. One of the projects (carried out at the Department of Education, Umeå university) is linked to the ideological function of the educational system, i.e. higher education is assumed to give its specific contributions to social and cultural reproduction. The project has its closest connections with Bernstein's theory of educational transmission (Franke-Wikberg, 1980).

In the project that is being run at the department of education, Göteborg university, the focus is on the cognitive side and one aim of that project is to give a description of some aspects of what can be regarded as *academic intelligence* (Dahlgren, 1980).

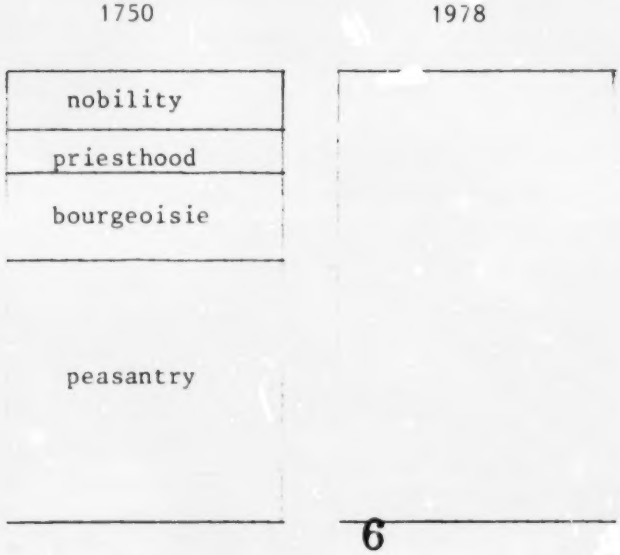
The main aim of the present study is to determine how groups of university students, who have just begun their studies, view today's society in the light of the basic conceptions of social stratification expressed by them.

II. METHOD

The empirical investigation to be reported on here was, as has been mentioned above, carried out within the framework of a Swedish sibling-project on effects of higher education. These research projects are designed as longitudinal investigations whereby groups of students from four different academic career paths are interviewed at the beginning and at the end of their university education. The four different groups comprise students of engineering, medicine, psychology and economics/business administration. The particular question to be analyzed in this context, was given in an individually administrated interview, which lasted between 1 1/2 and 2 1/2 hours. The material consists of 169 subjects made up of 45 students of psychology, 45 of economics, 40 in engineering and 39 of medicine. (The answer from one medicine student was lost on this particular question).

The interview question

The formulation of the question in the interviews is as follows:



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One way in which society was divided in 1750 can be seen in the figure to the left. (An approximate sketch.) Today, we don't

talk about these groups. If you were to draw a similar picture of today's society, what would it look like? Use the empty space to the right.

After the subjects had completed the graphic illustration, the following questions were put to them:

What basis of classification did you use?

and

What do the categories contain? Can you give examples?

and finally

Please, put your own occupational group into its right category!

In an earlier analysis of the outcome of this question, the various *aspects* chosen by the subjects when giving their conceptions of the social structure of society was focussed upon. In that analysis, the main aim was a methodological comparison with the results of a German study where the question was put in a fixed-alternative version (Sandberger, 1976). In the analysis of the answer of the open-ended version of the question, four categories of stratification were found:

A. Traditional social class stratification.

B. Single aspects chosen for stratification.

C. Cluster of aspects.

D. Harmonic conception of society.

(Dahlgren & Franke-Wikberg, 1979, p 7).

The outcome was found to be quite different from the German study, earlier mentioned, a result that was ascribed to the method of questioning.

In the present analysis an attempt was made at going beyond or rather under the content of the stratification aspects applied. This time, the aim was to obtain a more holistic characterization of the whole answer as well as the diagram. The analysis resulted in qualitatively different conceptions of the social structure of society, which can be claimed to have a more fundamental position in a person's perspective of what society looks like from this point of view.

To begin with, we read through all the interview answers several times in order to try to gain an impression of their character. This resulted in the identification of qualitatively different ways of reasoning about the social structure. Categories summarizing the most important as well as joint features were established following a large number of re-examinations. A further examination of the answers was made based on the categories established in which not only answer frequencies for each category were noted but also attempts were made to find and describe the differences within each main category. Obviously, the whole categorization procedure as well as the content of the question given were guided by theoretical considerations which, either explicitly or implicitly, are built into the research projects in their entirety. It is not by chance that certain dimensions of the answers seem to be relevant and others irrelevant. Consequently, an assessment must be made of how meaningful and usable the established categories are in comparison to the aims and reference points of the projects.

When the qualitative analysis was completed by the authors, a sample of the empirical material as well as a description of the categories were handed over to two independent co-judges, who were asked to make a categorization of the material. The average interjudge reliability reaches 94 percent, a value that must be considered as very satisfactory.

III. RESULTS

In this section, a description of the qualitative variation in the answers will be given. The answers have been divided into three main categories (A, B and C). Each category will be described and some examples, in the form of interview excerpts will be given in order to illustrate the way the categorization has been made. For each main category we have chosen to give one example from each of the four lines of education.

A. A HARMONIC, NON-STRATIFIED CONCEPTION of the social structure of society. The kernel of this conception is that it expresses the idea of an existing *equality* in a society of the kind Sweden represents. Among the students placed in this category there are a number who say that they neither can nor will sketch any current picture of so-

ciety and consequently do not complete the first task. There are also students who write in the empty figure answers of the type *They are all at the same level, They are all worth an equal amount. I don't think that there are any borderlines.*

Examples:

S: I don't usually divide them into ... You can divide them into different occupational groups, you see.

E: Don't you feel like making that sort of classification?

S: No, I don't think ...

E: Don't you think there are any important differences between different groups in our society?

S: No, of course, there may be some. In any case, I don't want to sit here and put people into different groups. It's wrong (student of economics).

S: ... I don't think there is any hierarchy ... therefore I can't put it into hierarchies here except as a result of all citizens having rights and obligations today ... and maybe we've got that without a Government that ... I mean that a government can't do things today without the help of the citizens ...

E: What you mean is that today there is no form of hierarchy ...

S: Well, no. I don't think so (student of psychology).

S: ... people talk about upper, middle and lower social groups, but I don't know ... it's not possible to draw a distinction just there ...

E: In that case, why isn't it possible to draw any distinctions anymore?

S: Well, of course, everybody has more or less the same, the same economic standard, as it were, there isn't anybody, who is sort of terribly rich ... and everybody can afford to eat and wear clothes and that sort of thing ... I don't think there's any great difference.

E: So there aren't any of those groups left in society so ... say different social groups or strata?

S: No ... it's true that people are different too, but I mean ... obviously, it's true you can to a certain degree see the difference between university graduates and workers and that sort of thing, but ... not by their appearance ... I mean

S: *that perhaps they differ in the way they think and talk and so on, but ... you can't sort of go out into the street and point like this and know exactly ...* (student of engineering).

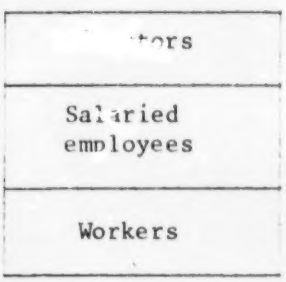
S: *Yes ... there must be groups of course, but I don't think that there are any groups that you can classify like this ... because, if anything, today you can divide it into ... yes, you can divide it into families with children and single persons ... but, I think it's almost impossible to classify it according to groups so ... because you still have to see it as a sort of class division* (student of medicine).

As is obvious from the subjects quoted above, there are basically *two* ways of concieving of society as harmonic and non-stratified as regards social structure. On the one hand, there is the idea that social stratification is *undesirable* i.e. a normative statement meaning that this view should not be preserved, which can be made simply by giving expression for it. On the other hand, there is the idea that social stratification is *non-existent*, i.e. there are *in fact* no identifiable social strata in society.

B. A HARMONIC, STRATIFIED CONCEPTION of the social structure of society.

This conception is essentially characterized by the existence of social stratification but this organization is regarded as *absolute* i.e. the higher position of one group in the societal hierarchy is not dependent on the lower positions of other groups.

Examples:



S: *It's the job they have that determines everything. Actually, I don't think one should talk about different groups in today's society. One can classify people because they're*

S: *directors, salaried employees and workers but that it must be ... Just because one puts directors at the top doesn't mean that they have to be best. I definitely don't think so. There shouldn't be any class distinction.*

E: *Does it mean anything that in your picture directors are placed above workers?*

S: *No, it's just that directors are at the top and then salaried employees and then workers. But I don't put them at the top of society just because they're at the top. I could place the workers just as high up* (student of economics).

Year 1978

Upper class
Middle class
Working class

S: *Up here, I suppose, sit all these ... upper class, the highly paid ... the self-employed, industrial management and so on ... officials in the civil service, universities, who have large incomes. These, the middle class, I suppose one could compare them with the bourgeoisie ... they must be salaried employees and* **teachers** *and the middle class ... and the working class consists of people in industry ... industrial workers, construction workers. But then I think ... then it's not that the wage differences are so large between these groups but that it's more of a social difference, I think* (student of psychology)

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1 Upper class
2 Middle class (bourgeoisie)
3 Working class
Lower class
Drop-outs

S: *Yes, the upper class are the sort of people you see in society who have a little extra, can afford those sort of extravagances, luxury cars and those sort of things so that they show the world that they are rich or are regarded as being able to afford it. The middle class, I think they're the sort of people who have houses, terraced houses or large flats or can afford most things like a summer cottage and such things. The working class, I suppose there's that small difference between them, they're not so well off. They have to save and they don't sort of have two cars but rather one car and not one of those better models instead they think of the practical side of things ... It's money, in my opinion, that makes the social groups and then also become the same ... and then there are the more or less* (student of medicine).

Wealthy (nobility)
Bosses
Office workers
Workers

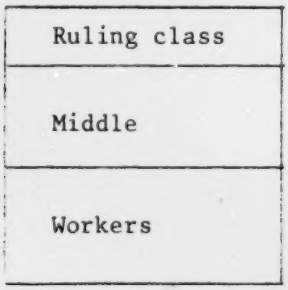
S: *... I'm thinking of ordinary workers, who have a common occupation and factory workers and agricultural workers, then office workers ... they don't have the physique, they don't do physical work. Perhaps they think a bit more and have quieter jobs and use typewriters. And then the bosses higher up such as company executives and perhaps directors and the like ... it has alot to do with money when one thinks about ranking them* (student of technology).

As in the case of the first category, this contains a certain variation in the sense that e.g. the first student of economics says that there are differences between groups of people from his perspective, primarily based on the hierarchy in working life, but followed by the *denial* that such differences should have any consequences as to the way people are valued by the society. The other subcategory consists of answers where the existence of a hierarchy of the population is registered and established as an unshakeable fact. That is the way it is. The reasons for the variation established are to be found in e.g. differences in economic status, educational status of social groups.

C. A NON-HARMONIC STRATIFIED CONCEPTION of the social structure of society.

The deep-structure of the answers in this category is that they give expression to the idea that the position of one group in the hierarchy is defined by the relation to another group or other groups in the hierarchy. This means that an element of *conflict* is implicitly or explicitly assumed between the actual groups mentioned.

Examples:

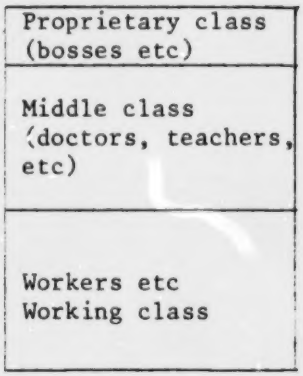


S: At the bottom are the workers. That's how it's been for a very long time and will probably remain so for a very long time. The basis of everything is the workers. Then we have the middle. This is where you find the so-called white-collar occupations. And here at the top we have the ruling class. It's about the same as it was in 1750. The only difference is that they're not called nobles and priests anymore. I don't think the difference is especially great. It's been evened out a bit but there are still differences.

E: Which categories do these include?

S: I suppose the Government class would be included in the ruling class. Then, I suppose, there are company executives and people with the right of decision. The refined part of the workers, the white-collar occupations, is probably in the middle. They go from the ruling class and tell the workers what they have to do (student of economics).

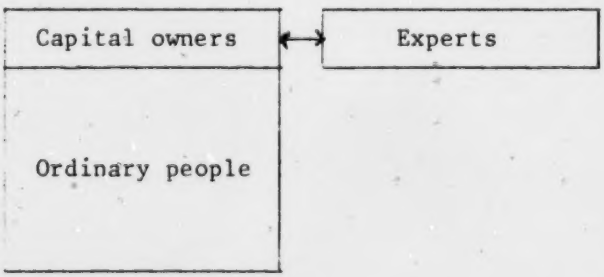
Year 1978



S: /At the top/ are those people who have an enormous amount of power to control our society because of their money.

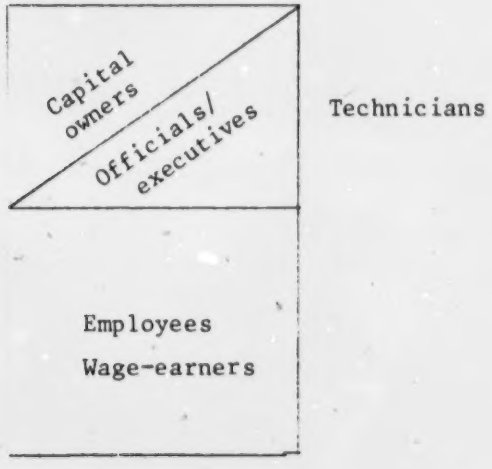
E: ... So it's above all, money you think of as being the main difference between these groups, or are there other things ...?

S: ... perhaps mostly money but knowledge too ... but like this higher class, it can use, for example, the middle class to increase its wealth or to get more money ... or power due to the fact that researchers, for example, who are part of the middle class, that they give their results to those who give them money (student of psychology).



S: Yes, that was a difficult task, but as I said about this old classification, we have nobles, priests, bourgeois and peasants who are the four estates and we don't have them anymore even if there are a number of nobles left. But I see it as a classification of power and privileges. If you classify people in today's Sweden then there's no doubt that there are people with greater power than others and I'd like to call those who have the power capital owners and the experts. And that's why I've drawn an arrow between them because a capital owner or a man with a large amount of capital is completely dependent on the experts because, you see, he can't have all the knowledge about different things himself because every-

S: *thing is so specialized and so highly developed. So the experts´ judgement is also needed and they´re often extremely dependent on what the experts say. And so I´d put ordinary people under here like a large ... it´s extremely difficult to classify. If you look at society today then we don´t have any people with exactly ... who are destitute from a purely material point of view, instead ... everybody has the opportunity to lead a more or less decent life. The problems are on quite different levels now and in quite different areas and it´s not possible to classify them. They don´t have alot of power. I definitely wouldn´t put down political power because I feel that people in today´s society ... that power is non-existent so you can´t classify it in the form of any special groups; rather, everybody is actually equally helpless, are equally helpless compared with capital owners and the experts* (student of medicine).



S: *At the bottom, in any case, I´ve put wage-earners and employees. Then it gradually goes over ... or then it goes over to officials and executives but it all the time ... capital owners. And at the top there are no officials and executives at all; instead, there are only capital owners at the top. Politicians, for instance, they land up among officials and executives. I´d like to put them there because they don´t have the real power. True, they do have great power but I don´t believe they have the real power in Sweden* (student of engineering).

The two main aspects chosen for stratification are *power* and *economic status*. Very often the latter is a more concrete way of expressing power. Differences as regards economic circumstances are often referred to also in conception two, (harmony-stratification) but when occurring among the answers that have been categorized in this group, economic superiority refers to ownership of productive resources. It should be pointed out that two different variants are to be found in category C of which one of the types of answers reflects a fairly clear, materialistic and/or basic Marxist view. This is expressed in terms of capital owner/owner of the means of production versus workers. In the second variant, power and influence are used as a point of reference or as a dimension in a combination of points of reference.

The empirical material is distributed over the three categories according to table 1.

Table 1. Distributions of answers over the various categories.

Category	n	%
A. Harmonic-non-stratified	20	12
B. Harmonic-stratified	79	47
C. Non-harmonic-stratified	70	41
Total	169	100

Apart from this table, which shows that B and C are about equal in size, there is also an overview where the four different subject groups are compared. There are no remarkable differences between the subgroups. It might be worth mentioning that a somewhat larger number of students of medicine and psychology are to be found in category C than is the case with students of economics and engineering. (Appendix: Table 1.)

In accordance with the two variants in category C (cf page 15), these answer patterns have been tabulated according to subject (Appendix: table 2). The table shows that, totally, the students are fairly evenly distributed over the two variants. The majority of the students of economics in category C are in I (non-specified *power dimension*) and the majority of the students of psychology are in II (those who express themselves in terms of capital owners/workers).

From the point of view of the aims of the Umeå project, the students' social background constituted the central sampling principle. Table 3 in the appendix shows how students from the upper and lower middle class and the working class are distributed over the categories of answers obtained. It is interesting to note that more than half of the students coming from the working class have been placed in category C, i.e. the non-harmonic category. More than half of the students from the upper and lower middle class (54% and 63% respectively) belong to the harmonic-stratified category. 23% of the upper middle class have been placed in category A, the harmonic-non-stratified variant, which can be compared with 3% and 9% from the lower middle class and working class.

In the appendix (table 4), the answer patterns obtained have been related to the Umeå and Gothenburg material respectively. A somewhat larger part of the Umeå group was found to belong to category B than was the case with the Gothenburg group, while a somewhat larger part of the latter group was found to belong to category C. The differences are, however, small.

IV. CONCLUDING REMARKS

With the qualitative orientation of the research work presented here, the categories obtained should be regarded as the primary results. In our study, it has been possible to summarize the students' conceptions of how today's Swedish society is divided in the form of three main categories which are qualitatively different:

A. THE HARMONIC, NON-STRATIFIED
B. THE HARMONIC, STRATIFIED
C. THE NON-HARMONIC, STRATIFIED

As can be seen from the categories' designation, the harmonic, stratified conception has an element in common with each of the other two categories. The combination of the conception of society being hierarchically divided and the assumption that agreement and harmony exists between the social groups in question reflects, however, a way of thinking and reasoning that is in stark contrast with what has come to light in the students belonging to both category A and category C.

Seen in relation to the consensus perspective vis-á-vis the conflict perspective (page 1), categories A and B belong to a consensus perspective. The third category, within which it is assumed that the different social groups are in a state of conflict with each other, belongs more or less to a conflict perspective.

It is important to remember that the subjects involved in this study have many years of education behind them during which time above all conceptions falling within categories A and B can be assumed to have been given nourishment. The *equal value* ideology, which has permeated post-war education and educational planning, can hardly be more explicitly expressed than it is by the students who see society as being harmonic and non-stratified. These students either do not see or do not want to see that differences exist between groups of individuals in spite of the real and large social differences that today exist in different respects. The normative approach, which not least characterizes much of the educational research so far carried out, has its direct equivalent in the students placed in category A.

Compared with the West German study referred to earlier (page 3), the harmonic, non-stratified conception appears to be relatively less usual among the students used in our study. The majority of the students having a harmonic conception of society are, instead, found in category B. These students register and establish the fact that differences do exist. The statements made by this group, which constitutes almost half of the students, give expression to a *taken-for-granted* perspective. The fact that differences between groups of individuals exist is hardly recognized as a problem at all. That is how it was, that is how it is and that is how it will probably remain. The *natural* division is here most frequently related to the hierarchical occupational structure in working life. It is interesting to note that a large number of the students in category B emphasize the fact that the stratification made did not have any effect at all on their view of mankind. Thus, the reluctance to classify people in a *hierarchy of values* results in them de-emphasizing the actual differences. Here, the ideology of equal value appears again as it does in the category A answers.

In the third category of answers, the non-harmonic, stratified conception, the students are not satisfied with establishing the fact that there are differences between social groups; instead, they base their reasoning on the assumption that there is a state of conflict between the groups and that the power these groups have is different. At first glance, it might seem peculiar that 40% of the students could have been classified as belonging to this category. Consequently, it is essential that attention is paid to the two variants in this category (cf page 15 and table 2 in the appendix). In this context, it is, however, of the greatest importance to note that the class distinctions observed apply not only to the non-harmonic category of answers but also to the results in their entirety (page 15 and table 3 in the appendix). It can be of interest to note the differences established between students from the working class and the lower and middle class respectively, in particular in the light of the available research results that demonstrate the great importance of social background to university students' conception of society (page 21). Considered in terms of radicalism in accordance with what has been usual in earlier research, it does not seem likely that so-called radical students will be found in other than category C - the category which, in the Umeå material, is heavily over-represented by students from the working class.

Assuming that the different lines of education covered by this study influence the students in different ways, it is of interest to see if, initially, there were also differences between students from the different groups of subjects. As regards this aspect, it would seem that the relationship between education and production is the most decisive for the type of influence; this means that the lines of education for students of economy and engineering form a group that can be distinguished from students of psychology and medicine (see also Franke-Wikberg, 1980). The differences as regards subjects have, however, proved to be relatively small in the case of the first-year students included in this study. Where appropriate, they are, however, in line with the socialization that can be expected. Category C contains a greater number of students of medicine and psychology than students of economy and engineering while the reverse is true with regard to the A category of answers (page 15 and table 1 in the appendix). In this respect, the relative distribution within and between the groups of subjects for category C's two categories of answers is

also worth noting (table 2, appendix). The comparative analysis, which we intend to carry out at a later date, of the students' ways of answering before and after their studies will have the aim of discovering whether changes can be established. Naturally, the differences in starting-points between the groups of subjects will have to be taken into consideration.

The question about how students conceive of the social structure of society is an example of the kind of questions that are included in the two ongoing Swedish projects about effects of higher education. The selection of questions has been guided by somewhat different criteria in the two investigations according to the differences described on page 3. The two research undertakings have, however, in common an endeavour to uncover significant aspects of the change in thinking and value systems that may be the major enduring outcome of higher education. Hence, the description of the outcome of the questions put has to be regarded as a result in itself. The intriguing question about the origin of changes is naturally an important one. It has, however, to be stressed that such explanations in one of the projects will be sought for in the structure and content of the answers given by the studentsand in the other project by considering the structure and content of the academic studies. The comparatively minor stress on explanatory factors that are to be regarded as external, in our view make up the uniqueness of these two projects.

REFERENCES

Astin, A.W. *Four Critical Years*. San Francisco: Yossey-Bass Inc Publ. 1977.

Bernstein, B. *Class, Codes and Control. Volume 3*, second edition. London: Routledge & Kegan Paul. 1977.

Bowles, S & Gintis, H. *Schooling in Capitalist America. Educational reform and the contradictions of economic life*. New York: Basic Books. 1976.

Carlsson, G. & Gesser, B. Universities as Selecting and Socializing Agents: Some recent Swedish data. *Acta Sociologica, volume 9*, fasc. 1-2 Copenhagen. 1965.

Cigéhn, G. *Förändringar i partipolitiska sympatier och yrkesval under studietiden*. Akademisk avhandling. Sociologiska institutionen, Umeå universitet. 1975.

Dahlgren, L.O. Effects and defects of education. Contribution to the Annual Meeting of the NFPF (Nordic Society for Educational Research), October 23-26, 1980, Göteborg, Sweden. /Manuscript/

Dahlgren, L.O. & Franke-Wikberg, S. A Comparative Methodological Study of Students' Conception of Structure of Society. *Reports from the Institute of Education, University of Göteborg*. No 90. 1980.

Franke-Wikberg, S. The LONG-project and a Theory of Educational Transmission. *Document from the LONG-project*. No 15. Department of Education, University of Umeå.

Gesser, B. Studenter: Utbildning och politik. *Forskning om utbildning (2)*. Stockholm: Liber. 1978.

Härnqvist, K. *Individual Demand for Education*. Analytical report. Paris OECD. 1978.

Lundgren, U.P. *Att organisera omvärlden. En introduktion till läroplansteori*. Stockholm: Liber. 1979.

Marton, F. Describing conceptions of the world around us. *Reports from the Institute of Education, University of Göteborg*. No 66. 1979.

Paulston, R.G. *Conflicting Theories of Social and Educational Change: A Typological Review*. Pittsburgh: University Center for International Studies. 1976.

Sandberger, J.U. "Gesellschaftsbilder" als subjektive Indikatoren im sozio-politischen Bereich. *Zentrum I Bildungsforschung, Under-Forschungsbereich 23*, Konstanz. 1976.

Svensson, A. Jämlikhet och högskoleutbildning. *Rapporter från Pedagogiska institutionen, Göteborgs universitet*, nr 154. 1977.

APPENDIX

Table 1. Distribution of answers on the various categories related to the four career paths.

Category	Economics		Psychology		Medicine		Technology		η	%
	η	%	η	%	η	%	η	%		
A. Harmonic-non stratified	8	18	5	11	2	5	5	13	20	12
B. Harmonic-stratified	23	51	21	47	15	39	20	50	79	47
C. Non-harmonic-stratified	14	31	19	42	22	56	15	37	70	41
Total	45	100	45	100	39	100	40	100	169	100

Table 2. The two subgroups in category C related to the four career paths

Variation within category C	Economics	Psychology	Medicine	Technology	Total
I. Non-specified power dimension	9	6	11	8	34 (49%)
II. Conflict capital owner/ workers	5	13	11	7	36 (51%)
Total	14	19	22	15	70 (100%)

APPENDIX

Table 3. Distributions of answers on the various categories related to student social background. (The table contains only the Umeå material.)

Category	Upper middle-class		Lower middle-class		Working-class	
	n	%	n	%	n	%
A. Harmonic-non-stratified	6	23	1	3	3	9
B. Harmonic-stratified	14	54	24	63	13	37
C. Non-harmonic-stratified	6	23	13	34	19	54
Total	26	100	38	100	35	100

Table 4. The students from the two sister projects distributed over categories of answers obtained.

Category	Umeå group		Gothenburg group	
	n	%	n	%
A. Harmonic-non-stratified	10	10	10	14
B. Harmonic-stratified	51	52	28	40
C. Non-harmonic-stratified	38	38	32	46
Total	99	100	70	100

Reports from THE DEPARTMENT OF EDUCATION UNIVERSITY OF GÖTEBORG

1980:01 Johansson, Britt: Need of knowledge in nursing and demand for knowledge in nursing education. Juli 1980.

1980:02 Dahlgren, Lars-Owe och Franke-Wikberg, Sigbrit: Social Structure of Society through the Eyes of University Students. October 1980.